CLAIMS:

1. A method for stabilizing video data, said method comprising the steps of :

- subdividing said video into a plurality of successive frames ;

- dividing each of said successive frames into a plurality of blocks ;

- determining for each block of each frame a motion vector representing the direction and magnitude of the motion in said block, said vector GMV at an instant t being called global motion vector GMV(t) and representing said motion at the instant t with respect to the previous frame ;

- defining a modified vector, called integrated motion vector IMV(t) at the instant t and designating the final motion vector correction to be applied to the current frame in view of its motion correction, said integrated motion vector being given by the expression :

$$IMV(t) = GMV(t) + a(E) \,.\, IMV(t-1)$$

where GMV(t) is the global motion vector of the current frame at the instant t, a(E) is a variable adaptive factor depending on an expression E and IMV(t – 1) is the integrated motion vector corresponding to the previous current frame ; and

- modifying the video data according to the modified integrated motion vectors defined for each successive current frame.

2. A stabilizing method according to claim 1, in which said variable adaptive factor depends on the sum of the two last global motion vectors.

3. A stabilizing method according to claim 2, in which the variable damping factor a(E) is determined independently for the horizontal and vertical coordinates of the vectors.

4. A stabilizing method according to anyone of claims 1 to 3, comprising an additional correction step, provided for checking if the correction of motion vector is not above a given threshold and, if yes, modifying said correction so that it stays within a predetermined allowed range.

5. A system for stabilizing video data, said system comprising :

- a frame storage for storing a plurality of successive frames of video data of the video recording ;

- a processor coupled to said frame storage for dividing each frame into a plurality of blocks, determining for each block of each frame a motion vector which represents the direction and magnitude of the motion in said block, said vector at an instant t being called global motion vector GMV(t) and representing said motion at the instant t with respect to the previous frame, defining a motion vector, called integrated motion vector IMV(t) at the instant t and designating the final motion vector correction to be applied to the current frame in view of its motion correction, said integrated motion vector being given by the expression :

$$IMV(t) = GMV(t) + a(E) \,.\, IMV(t-1)$$

where GMV(t) is the global motion vector of the current frame at the instant t, a(E) is a variable adaptive factor depending on an expression E and IMV(t – 1) is the integrated motion vector corresponding to the previous current frame, and modifying the video data according to the modified integrated motion vectors defined for each successive current frame.